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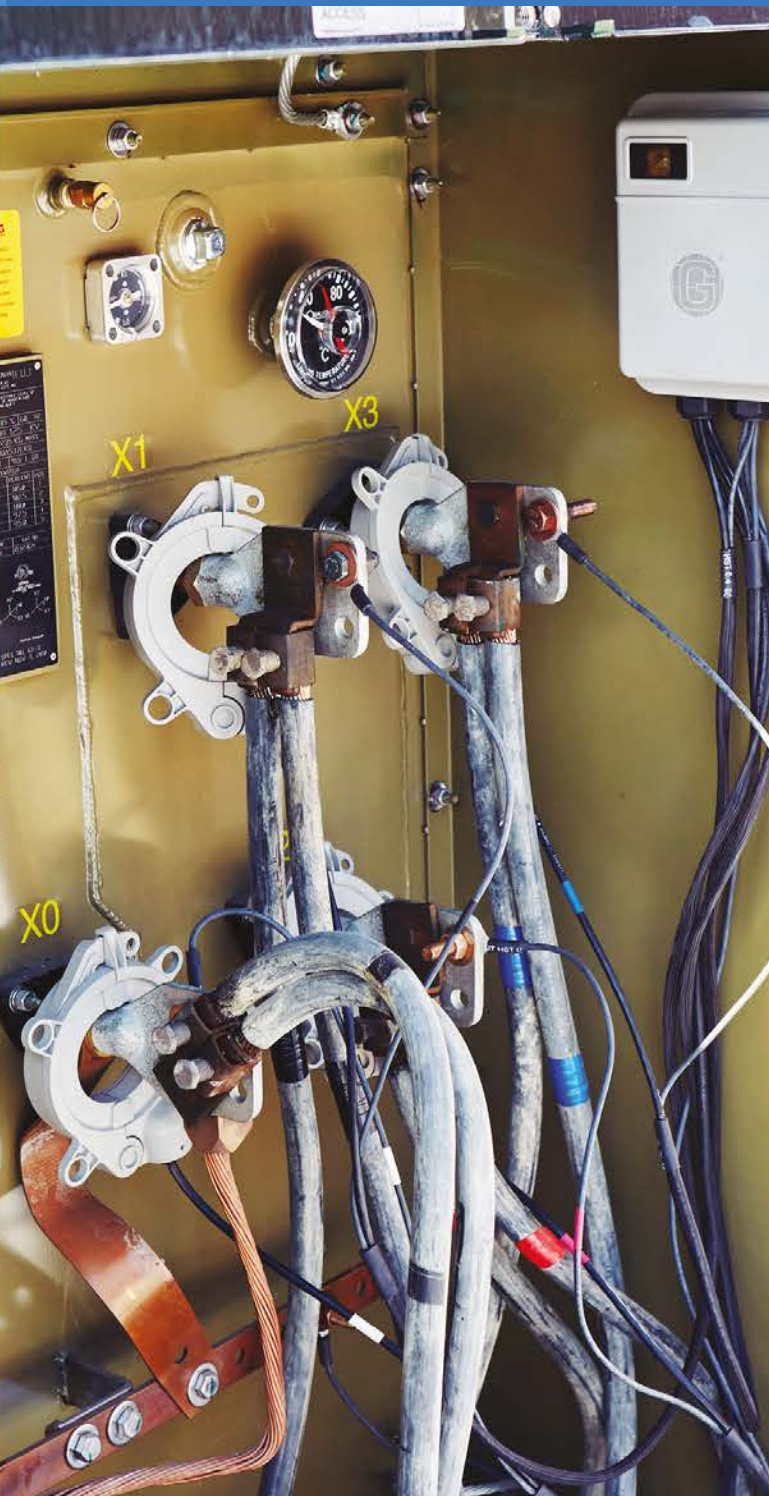
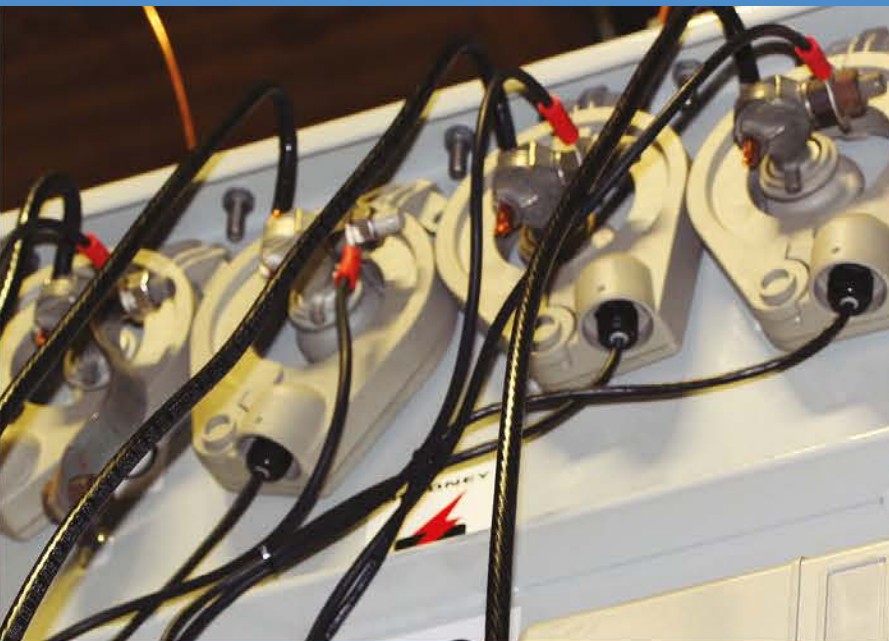


FOUNDED ON PILLARS OF EXCELLENCE

HONESTY - INTEGRITY - RESPONSIVENESS - RESPECT

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OPTIMIZE



ENERGY // EFFICIENCY

LIMITED VISIBILITY

The network of interconnected assets spanning between substations and endpoint meters remains the most volatile, dynamic and expansive component of the distribution grid.

Limited visibility into the Distribution Grid results in reactionary and costly grid management, negatively impacting rates and customers.



SUBSTATION



[DISTRIBUTION GRID]



METER

Intra-grid sensing devices leverage the strategic value of transformers within the distribution grid. Utilities benefit through improved operating efficiencies, and increased power delivery reliability. As part of an overall Smart Grid solution, distribution transformer monitoring devices provide data to facilitate distributed generation, reduce outages, enhance asset supervision, and provide the tools for analysis of system losses including end-user meter reconciliation.

The GRID20/20 OptaNODE™ family of Distribution Transformer Monitor (DTM) devices addresses the utility's needs with rich functionality, accurate measurement, rapid deployment and ubiquitous communications capability.

PROBLEMATIC INTRA-GRID CONDITIONS

NON-TECHNICAL LOSSES

- Illegal pre-meter taps

TECHNICAL LOSSES

- Oversized transformers

ACCELERATED LOSS OF LIFE

- Undersized transformers

DER IMPACTS

- Reverse energy flows

- Voltage fluctuations

- Current spikes

POWER OUTAGES

- Overloaded transformers

GRID MAINTENANCE

- Truck rolls

- 'Hard to read' meters

GIS MAPPING ERRORS

- Load imbalances

- Inaccurate analytics

EXCLUSIVE PATENTED TECHNOLOGY

GRID20/20's OptaNODE™ solution consists of hardware and software components solely conceived to solve the industry's intra-grid monitoring needs in a cost effective manner.

OptaNODE™ DTM (Distribution Transformer Monitor) devices, designed upon exclusive patented sensing technology, and based on utilities input, deliver high accuracy readings over a wide range of operating voltages and currents, while their unique form factor offers the easiest and fastest installation time on the market. They incorporate state-of-the-art design, engineering, and manufacturing processes, thereby ensuring high versatility, and durability. Rapidly deployable, they fulfill the utilities' need for flexible, and compact devices, with safe, and quick installation capabilities.

OptaNODE™ HESS-Head End Server Solution, complements GRID20/20's offer. This versatile software platform allows users to achieve a myriad of functions within one consolidated system, transforming the granular data offered by the OptaNODE™ DTM into actionable information.

The OptaNODE™ family of products provides the key enablers for converting standard distribution transformers into Smart Transformers. The solution can be easily deployed stand-alone, to immediately provide highly accurate visibility into the Distribution Grid; or it can be combined with existing AMI networks and SCADA systems to achieve a genuine comprehensive Smart Grid experience.

EXTREMELY ACCURATE

- Exceptionally wide current sensing range
- Different transformer types and ratings supported

FASTEST & EASIEST INSTALLATION TIME ON THE MARKET

- Plug & Play
- Unique form factor
 - Fully self-contained device
 - Instant data availability

FUTURE PROOF

- No re-calibration required
- Maintenance free
- Non-corrosive rugged polymer design
- Over The Air activation, configuration and upgrades

VERSATILE

- Multiple data-points
- Forward and Reverse Energy monitoring
- Standard protocols - DNP3, MultiSpeak
- Onboard data storage

MULTIPLE COMMUNICATIONS OPTIONS

- Wireless cellular & RF-MESH
- ### INDEPENDENT OF METER-TO-CASH PROCESSES

- Rapid value realization
- Strategic 'surgical' deployments

HIGH QUALITY

- ISO 9001 manufacturing
- Carrier certifications
- Standards compliance
- Designed to meet industry norms (ANSI, IEC)

ACTIONABLE INTRA-GRID INFORMATION, BASED ON ACCURATELY MEASURED DATA

BEST-IN-CLASS DISTRIBUTION TRANSFORMER MONITORING SOLUTION



END TO END VALUE PROPOSITION

DESIGNED TO LOWER DEPLOYMENT COSTS



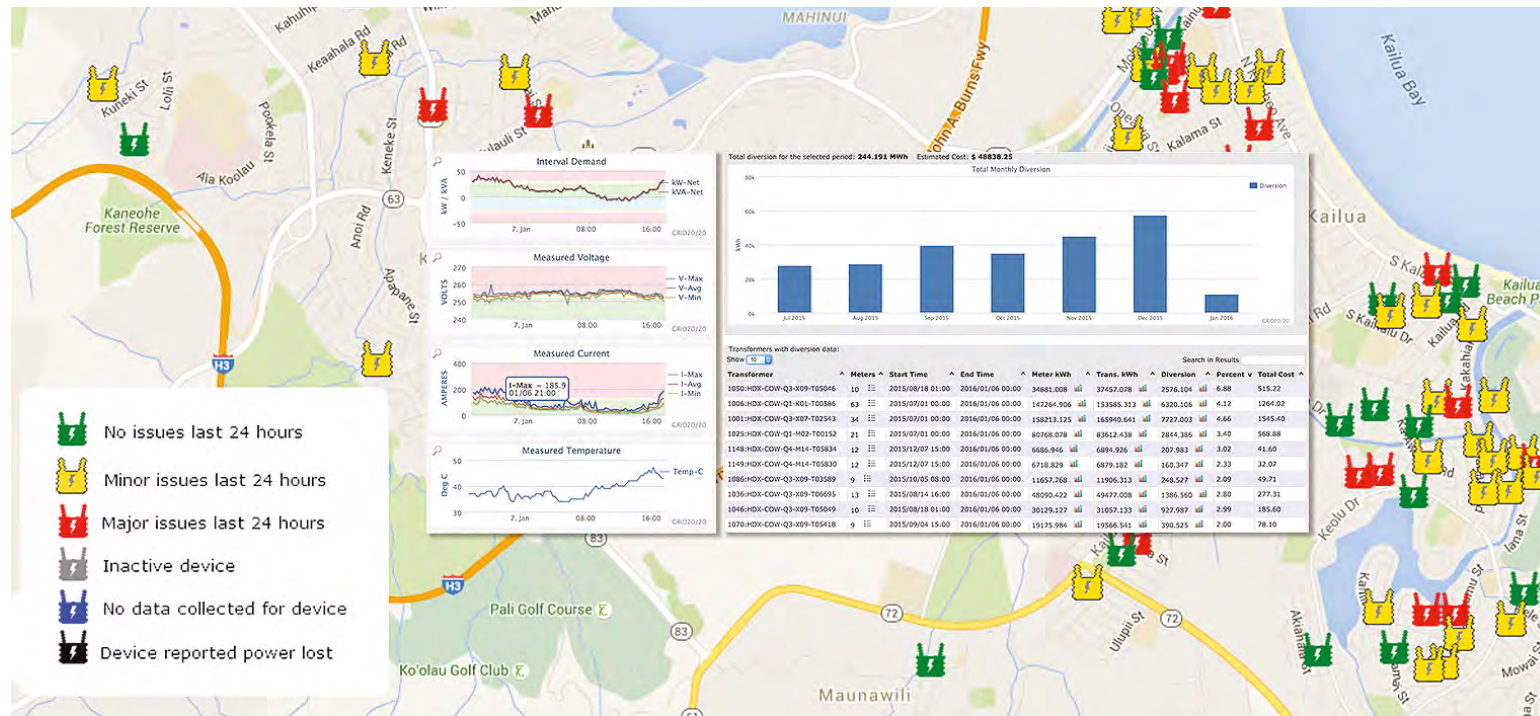
PLUG & PLAY INSTALLATION

**NO
NEED** **FOR**

- ▶ Special Tools
- ▶ On-site Configuration
- ▶ Highly Qualified Personnel
- ▶ Transformer De-energizing



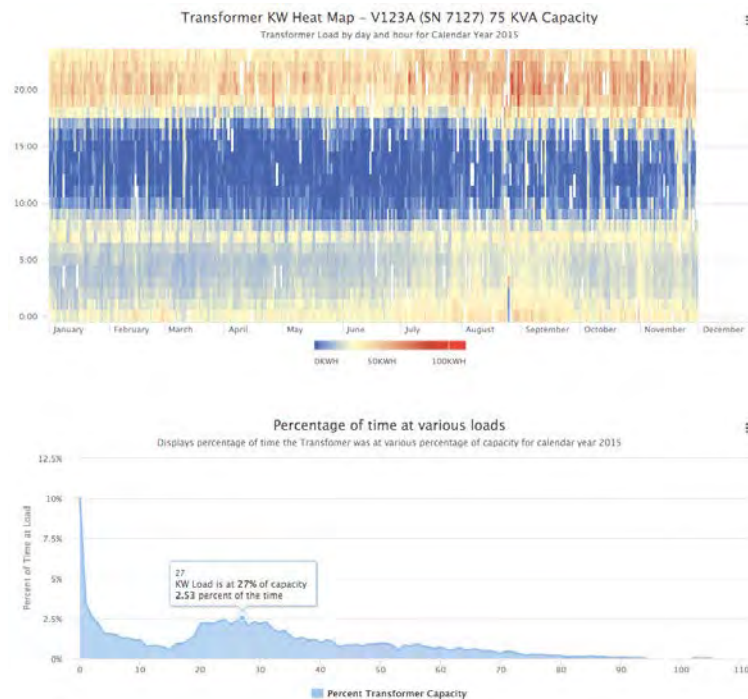
CLEAR VISION INTO YOUR GRID



GRID20/20's versatile software platform consists of a Data Collection Engine, a Monitoring and Management Tool for device deployment, operation and maintenance, and a Data Analytics Portal which provides timely, accurate information from within the heart of the distribution grid.

FEATURES

- Robust and Scalable Java™ Server Architecture
- Hosted in a World Class Data Center
- Collection Engine & Data Warehouse
- Monitoring & Management Platform
- Web Based, Secure Graphical User Interface
- Data Visualization, Analytics, Alarms & Alerts
- Integration with 3rd Party Platforms via DNP3, FTP, Web-services, and MultiSpeak Interfaces





OptaNODE™ DTM devices immediately turn distribution transformer assets into valuable intelligent nodes. They are specially designed to monitor the performance of distribution transformers, while leveraging their strategic location within the grid. Equipped with two-way communications and onboard data storage, they provide vital intra-grid information.

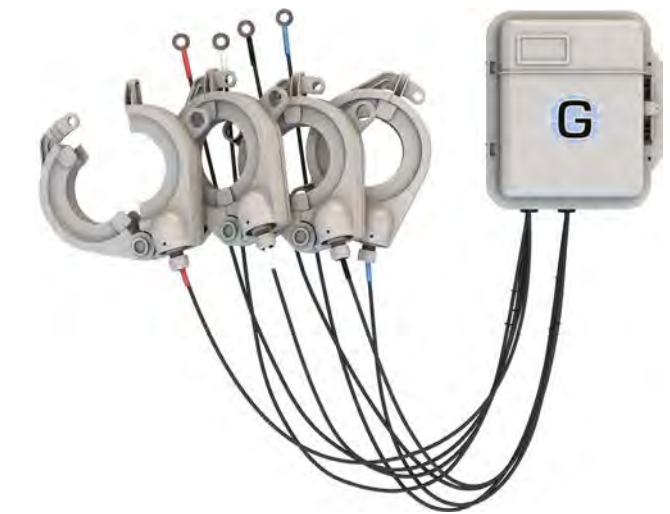


OptaNODE™ PDTM

The Poly-phase Distribution Transformer Monitor (PDTM) is a robust, flexible and rapidly deployable device, designed for use in both, three-wire and four-wire applications. It supports the optional use of external antennas, and may be installed using its integrated magnets or alternative pole mounting kit.

SUPPORTED TRANSFORMERS:

- Pole Top, Vault, or Pad-Mounted; Single Unit or Bank
- Wye (Y): 600Y/347, 480Y/277, 208Y/120 V
- Delta (Δ): 600, 480, 208 V
- Other: 120/240 V Split Phase, 120 V Single Phase



OptaNODE™ DTM

The single phase Distribution Transformer Monitor consists of accurate and patented sensing, metrology and communications components, combined into a compact and lightweight self-contained device. It installs in minutes, attaching to the transformer by means of its integrated magnets.

SUPPORTED TRANSFORMERS:

- Pole Top, Vault, or Pad-Mounted
- Single Phase, 3-Wire (Split Phase): 120/240 V
- Single Phase, 2-Wire: 120, 240 V



POWERFUL INTRA-GRID INTELLIGENCE



NOW IN THE PALM OF YOUR HAND

CLEAR VISION INTO THE DISTRIBUTION GRID RESULTS IN: COST SAVINGS, IMPROVED KEY PERFORMANCE INDICATORS AND BETTER SERVICE



TOP 4 GLOBAL MARKET DRIVERS FOR DTM IMPLEMENTATION

DISTRIBUTED ENERGY RESOURCES The OptaNODE™ DTM delivers exceptionally accurate Forward and Reverse Energy measurements, providing Utilities with timely and reliable vision into changing power flows and voltage fluctuations that cause grid destabilization and create safety concerns.

POWER THEFT IDENTIFICATION GRID20/20's patented technology converts transformers into unparalleled power consumption reconciliation sources to be compared to downstream endpoint meters. The OptaNODE™ solution helps Utilities to identify unmetered losses, including pre-meter taps, which are rapidly growing in occurrence and remain undetected by AMI, while also improving GIS mapping accuracy.

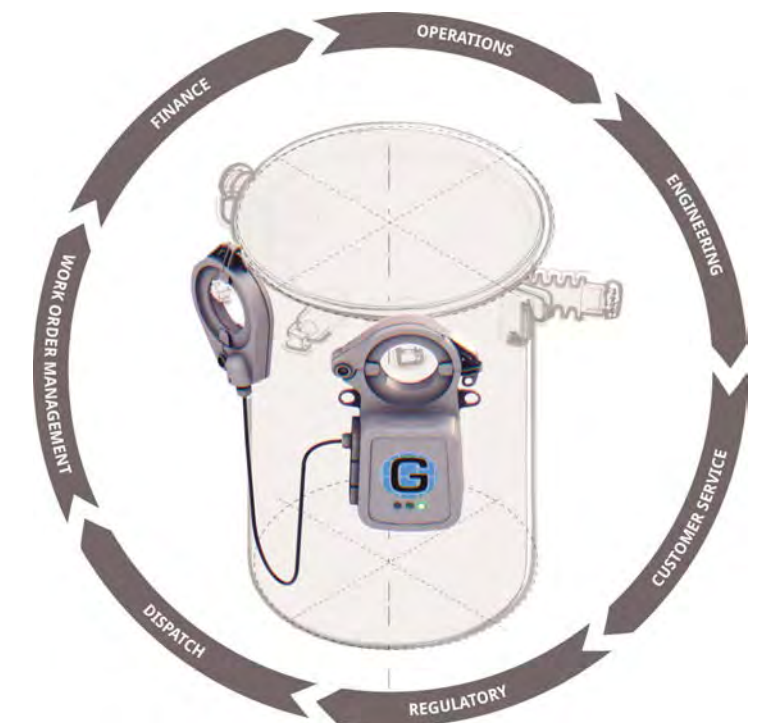
ASSET SUPERVISION Distribution grids are comprised of aging assets and continuously changing conditions. GRID20/20 enables Utilities to identify over/under loaded assets, discover voltage and current spikes, apply preventive maintenance, pinpoint outages, and reduce truck rolls.

OUTAGE NOTIFICATION & ACCELERATED RESTORATION OptaNODE™ DTM devices can notify operators of power interruptions, enabling faster location of outages, and accelerating restoration. Power outage occurrences, frequencies and durations can be reported to assist with utility performance metrics.

GRID20/20's OptaNODE™ intra-grid sensors leverage the strategic value of data captured at distribution transformers. Utilities which have not embraced AMI technologies can realize the Smart Grid immediately at a fraction of the cost; while AMI enabled grids can benefit from the improved accuracy and granularity offered by intra-grid monitoring.

One Solution, Vast Value Propositions

- ▶ Revenue Protection
- ▶ Asset Management
- ▶ Voltage Optimization
- ▶ Distributed Energy Resources Support
- ▶ Outage & Restoration Notification
- ▶ Load Research
- ▶ Preventive Maintenance
- ▶ Alarms & Alerts
- ▶ Power Quality Monitoring
- ▶ AMI Network Range Extender



The unique capabilities presented by the GRID20/20 OptaNODE™ solution to capture and report a host of data points within the most dynamic and vulnerable segment of the grid is becoming a versatile game-changer for utilities around the world. The OptaNODE™ DTM immediately converts transformers from simple workhorse assets into valuable intelligent nodes. The solution has been successfully deployed, either as stand-alone or integrated with different 3rd party AMI and Smart Grid platforms in North America, LATAM, APAC, and more areas are emerging.

GRID20/20 currently holds 15 patents and 5 Trademarks, and has 27 pending patents in process around the globe. GRID20/20 is also a proud grant recipient of the Ontario Ministry of Energy's Smart Grid Fund initiative.

What our customers are saying

“ These devices are going to be a game-changer for us. Since we received our first DTM we have verified 6 thefts and will bill over \$60,000 by the end of the year. On all accounts this has been a very successful 6 months and we are looking forward to 2016. I just want to thank the entire GRID20/20 family for making this project a success.”

Dan M., Supervisor – Revenue Assurance, SMUD

“ The OptaNODE™ DTM devices have been great so far. Our experience with them has been extremely positive.

Jeff B., Electrical Engineer, Cowlitz PUD

“ The GRID20/20 devices that we are utilizing to gain further insight into our grid have proven to be a powerful tool for us. We are able to have more vision into the system as a whole, such as the loading directly at the transformer, improved transformer health monitoring, better understanding of system losses and we are looking at ways to use this information to improve our outage notifications. The team at GRID20/20 has been a pleasure to work with and I look forward to our continued partnership.

D. S., Distribution Engineer, EnWin Utilities





The team at GRID20/20 welcomes you to the next step in expanded distribution grid intelligence.

Our company is built upon four pillars of excellence: Honesty, Integrity, Responsiveness and Respect. By applying these principles to our business relationships, combined with our Best-In-Class solution, you will discover why electric utility operators worldwide are choosing GRID20/20 to help them advance their quest for superior grid management.

The OptaNODE™ solution leverages both the data and strategic location value of distribution transformers to provide you with unparalleled intra-grid intelligence.



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